



GUAM ENVIRONMENTAL PROTECTION AGENCY • *AHENSIAN PRUTEKSIÓN LINA'LA' GUÁHAN*

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## FACT SHEET

### PROPOSED CLEAN WATER STATE REVOLVING FUND (CWSRF) WASTEWATER CONSTRUCTION GRANTS PROJECT PRIORITY LIST

**FISCAL YEAR 2022-2023**

The Clean Water Act (CWA) authorized the US Environmental Protection Agency (USEPA) to establish a Clean Water State Revolving Fund (CWSRF) loan program to further the protection of public health and water quality objectives of the CWA. In the Pacific Islands, the CWSRF is administered by USEPA Region 9 as a direct construction grant program. The CWSRF program supports Guam's mission to protect and promote human health and safety, and to protect and improve water quality across the island by helping communities afford safe, sustainable, and resilient wastewater systems. The USEPA awards CWSRF Wastewater Construction Grant funding to Guam on an annual basis to provide financing to publicly owned wastewater treatment systems for planning, design, and construction projects that include (but are not limited to): plant replacement and upgrade; collection system installation, repair and rehabilitation.

Protecting and enhancing Guam's water quality and wastewater infrastructure is vital to the island's health and economy. The primary purpose of the USEPA CWSRF is to assist municipalities in meeting enforceable requirements of the Clean Water Act, particularly, applicable National Pollutant Discharge Elimination System (NPDES) permit requirements. A major component of the CWSRF grant process is the development of the State priority system and project priority list. This is done by ranking proposed projects to develop a priority list for funding, using an approved priority criteria system developed by the State. The USEPA awards grant assistance for projects listed on the State Project Priority List, consistent with the goals and requirements of the CWA.

Guam EPA reviews and revises its priority system and project priority list on a regular basis, in collaboration with GWA, so that the Territory of Guam will continue to qualify for CWSRF Wastewater Construction Grant funds. In order to achieve the goals and supporting requirements of the CWA in the CWSRF program, Guam EPA has created a project priority system consisting of criteria and ranking methods. The priority system, which is described in detail on the following pages, describes the methodology used to rank projects that are considered eligible for assistance. It also include the administrative, management and public participation procedures. As part of the process, a public review period and hearing must be held to give members of the public the opportunity to provide information and comments on the priority list.

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The attached proposed priority list for FY 2022-2023 was developed by Guam EPA in partnership with Guam Waterworks Authority (GWA). In order to develop the project priority list, Guam EPA worked closely with GWA to develop a list of proposed projects consistent with the goals of the CWSRF Wastewater Construction Grant program. GEPA and GWA then evaluated and ranked all proposed projects on the basis of the attached project priority criteria. The criteria used for ranking the projects are designed to achieve optimum water quality management consistent with the goals and requirements of the CWA, and are categorized in Guam's system into major and minor considerations. The major considerations count for up to three quarters of a project's priority score and are focused on the protection of public health, Guam's sole source aquifer, and the restoration or mitigation of waters which violate Water Quality Standards. The minor considerations, which contribute to up to one quarter of a project's score, include the use of innovative/alternative technologies, and the degree to which a project completes or otherwise utilizes previously funded infrastructure.

For more information or any aspect of the priority list process, contact **CAPT BRIAN G. BEARDEN, P.E., BSCEE**, Chief Engineer, Guam EPA Water Division at 671-3004779 or email address [brian.bearden@epa.guam.gov](mailto:brian.bearden@epa.guam.gov), or Water Pollution Control staff at 671-3004781, or visit the Guam EPA Main Office at 17-3304 Mariner Avenue, Tiyan, Guam.

# **FISCAL YEAR 2022-2023**

## **GUAM CLEAN WATER STATE REVOLVING FUND (CWSRF) WASTEWATER CONSTRUCTION GRANTS**

### **PRIORITY RANKING SYSTEM**

### **AND**

### **PROJECT PRIORITY LIST**

## **GUAM ENVIRONMENTAL PROTECTION AGENCY WATER POLLUTION CONTROL PROGRAM**

**#17-3304 Mariner Avenue, Tiyan  
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### **GUAM PRIORITY SYSTEM FOR DISTRIBUTION OF SECTION 201 TITLE II (CONSTRUCTION GRANTS FUNDS) AND SECTION 601, TITLE VI (STATE REVOLVING FUND)**

## **SECTION I. GENERAL POLICY**

The Clean Water State Revolving Fund (CWSRF) grants for the construction of municipal wastewater treatment works are made available to Guam pursuant the U.S. Clean Water Act. The primary purpose of the federal grants is to assist municipalities in meeting enforceable requirements of the Clean Water Act, particularly, applicable National Pollutant Discharge Elimination System (NPDES) permit requirements. Clean Water projects eligible for grants include a wide variety of wastewater treatment works such as; plant replacement and upgrade, more effective treatment systems, collection system installation, sewer system repair and rehabilitation, inflow/infiltration correction, and correction of sewer overflows. The funds are distributed by USEPA annually and are not sufficient to construct all wastewater facilities needed in Guam. The limited funds must be used in a manner consistent with the water quality and public health goals of Guam in order to insure maximum public benefit. The priority system described herein reflects the policy of the Guam Environmental Protection Agency (Guam EPA) regarding the utilization of the construction grant funds.

The Guam EPA recognizes specific goals which the priority system is to help attain:

- Pollution of the waters of Guam must be eliminated and prevented.
- The health of the people of Guam must be protected from any threat caused by the disposal of domestic, municipal, and industrial wastewater.
- Guam's established Water Quality Standards must be maintained in order to protect the many beneficial uses of Guam's waters such as recreation, drinking water supply, agriculture, fish and wildlife habitat, and industry.
- Guam's surface and ground water resources must be protected from pollution and where necessary, restored to ensure their future availability for all beneficial uses by the people of Guam.
- Water conservation, including potential reuse of wastewater, is of critical importance in ensuring the future availability of water resources for the people of Guam.
- Projects which make use of the principles of green infrastructure, water-energy efficiency improvements or other environmentally innovative technologies are desirable and encouraged.

The priority ranking system was developed to describe the methodology used to rank the projects that are eligible for assistance. Projects must be listed on the priority list in order to be considered eligible for financial assistance. The criteria used for ranking the projects are designed to achieve optimum water quality management consistent with the goals and requirements of the CWA. Projects in priority water quality areas are given high priority.

The primary purpose of the priority system is to establish a numerical rating methodology used by the staff of the Guam EPA and Guam Waterworks Authority (GWA) to evaluate needed projects in Guam in terms of the above stated goals. Eligible projects are placed in a list and are assigned a score and priority as described in the rating criteria. The product of this process is the project priority list, which will be made available for public review and written comment, prior to a final public hearing at which oral comments may be made. Following the public hearing, which may

take place during a regularly scheduled meeting of the Guam EPA Board of Directors, the project priority list may be adopted with or without modification based on comments received, and subsequently transmitted to the USEPA for final approval and use for the funding of eligible projects. Appropriate public information material consisting of the project ranking criteria and proposed project priority list is made available during the public comment period.

### **Priority System**

The priority list ranks projects with respect to other projects on the list. Projects with a higher score are ranked as higher priority than projects with lower scores. All projects are included on the list but available funding determines how many projects will be considered to be in the fundable range for a given year. The project priority list is intended to set the order by which projects are funded, from highest priority to lowest, however Guam EPA in conjunction with USEPA may allow for lower priority projects or “emergency projects” to be funded ahead of higher priority projects upon review of specific rationale presented by GWA.

## **SECTION II. ADOPTION OF PRIORITY LIST AND PUBLIC PARTICIPATION**

Each year the Guam EPA staff will work closely with GWA to review the previous priority list and prepare a new list which includes all projects for which federal assistance will be requested during a period starting at the beginning of the next fiscal year. The Guam EPA and GWA staff will reevaluate all unfunded projects on the previous year’s list, as well as any new proposed projects developed by GWA. The staff will consider and incorporate applicable EPA guidance in the development of the list. If no changes to the previously approved priority list are required, GWA and Guam EPA may choose to continue utilizing the previous priority list without change for the following year.

Should a new or revised priority list be prepared as a result of the annual review, the Guam EPA will conduct a public hearing on the proposed priority list following a 30 day public comment period in order to solicit final public comment, encourage public participation and approve the priority list taking into account the public comments. No less than 30 days prior to the hearing there will be a notice published in local newspapers and fact sheets will be available to all interested parties. The Guam EPA may also provide such notice by posting on the Guam EPA website, or any other means reasonably calculated to provide such notice to the general public.

Guam EPA will consider all testimony presented (both written and oral) at the public hearing or in writing prior to the public hearing and may modify the proposed list accordingly. Such revision will not be arbitrary but will be based on the established project rating method described in Section IV. The new rating would be based on new or corrected information obtained from the public participation. A responsiveness summary will be prepared and made a part of the records. The list and responsiveness summary will then be presented to the Guam EPA Board of Directors for consideration and adoption during a regular, public meeting of the Board. The adopted list will be submitted to USEPA for review and approval prior to start of the next fiscal year. Grants may be awarded from the priority list subsequent to USEPA acceptance of the list and the beginning of the new fiscal year.

### **SECTION III. ADDITIONS, MODIFICATIONS, BYPASS AND REMOVAL**

Priority list changes may only be made with the approval of USEPA Region 9. Additions and modifications (excluding contract change orders) which significantly alter the fundable priority list after its adoption by Guam EPA, will be made only when public health hazards or other valid and compelling reasons exist, such as for (but not limited to) emergency projects brought about by unforeseen infrastructure failures. An exemption to this requirement is that if additional funds become available during the year, the fundable portion of the priority list may be increased by including the highest ranked projects from the extended lists which are ready to proceed during the funding year.

The intention of Guam's priority system is to ensure projects that are on the list that are ready to proceed receive the funding required to complete the project. Projects on the fundable portion of the priority list may be bypassed after written notice is provided to the USEPA and the Guam EPA Water Pollution Control Program. Requests to bypass must be accompanied by the specific rationale for the request, and will be reviewed by both USEPA and Guam EPA. Acceptable rationales for bypassing a project may include, but not be limited to, a project not being ready to proceed during a funding year, or changing circumstances such as critical failures or new information such as modeling or monitoring data that make the need for a lower ranked project more important. Projects that are bypassed will remain on the priority list for consideration and re-ranking in future years.

#### **Emergency Projects**

It is possible that after Guam EPA uses the prioritization system to rank projects for a year, and informs the public of the rankings and selections, that the need for an emergency project will occur. Such projects may include those where some type of failure was unanticipated and requires immediate attention to protect public health. In such cases, Guam EPA has the authority to fund the emergency project ahead of the selected projects. The projects that were by-passed should receive the highest priority for the next available funding cycle. The determination will be based on an emergency situation resulting from an unanticipated water or wastewater system failure which requires immediate attention to protect the public health. The determination will also depend on an imminent and substantial health risk for cases involving chemical contamination or a potential disease outbreak. Specific examples related to the CWSRF include, but are not limited to: breakage or collapse of existing sewer mains; lift station failures; or failures of or damage to significant components of a treatment plant or outfall.

### **SECTION IV. PROJECT PRIORITY RANKING METHOD AND CRITERIA**

This section describes the project ranking method used in order to establish the project priority list. Projects are ranked according to the priority criteria on the basis of the total number of ranking points each project receives. Guam EPA evaluates the wastewater treatment projects developed by GWA individually for their anticipated impacts on public health and environment, aquifer protections and on existing and potential water uses in combination with present water quality conditions. Rating or scoring the project list will be done in collaboration by both Guam EPA and GWA for the purpose of establishing the project priority list. Projects with the highest number of priority points are ranked towards the top of the list.



In order to establish a Priority List of Projects, Guam EPA has developed criteria based on the above mentioned specific goals, considering the factors as listed below. These factors are divided into two categories; major and minor considerations. Major considerations include a project's impact on reduction of existing public health hazards, the degree of protection a project will provide to Guam's sole source aquifer, and whether a project will address an existing or potential violation of Guam's Water Quality Standards or other environmental laws and regulations. Major considerations are considered the higher priority criteria, with an assigned value of up to ten (10) points each, for a total maximum category point value of thirty (30). The larger the number, the greater the potential beneficial impact associated with the project. Minor considerations include the use of the innovative and alternative technologies, and the degree to which a project completes or maximizes utilization of previously built infrastructure (see 40 CFR 35.2015(b)(1)(B)(ii)). Minor considerations are scored on a zero to five (5) point scale, for a total maximum category point value of ten (10).

The subjective nature of the priority ranking system needs to be recognized. Guam EPA and GWA staff are expected to exercise judicious, professional judgment in assigning priority scores, and especially in prioritizing closely ranked projects.

## **RANKING CRITERIA**

### **MAJOR CONSIDERATIONS - 0 to 10 points each**

1). **Public Health** - Will the project eliminate or minimize an existing potential health hazard?

	<b>Depth of Impact</b>	<b>Points values</b>
a.	Severe hazard	10 points
b.	Moderate hazard	8 points
c.	Intermittent hazard	6 points
d.	Suspected hazard	4 points
e.	Potential hazard	2 points
f.	No hazard	0 points

2). **Aquifer Protection** - Will the project eliminate or minimize existing or potential contamination of the principal source aquifer.

	<b>Depth of Impact</b>	<b>Points values</b>
a.	Severe hazard	10 points
b.	Moderate hazard	8 points
c.	Intermittent hazard	6 points
d.	Suspected hazard	4 points
e.	Potential hazard	2 points
f.	No hazard	0 points

3). **Violation** - If project area has a known “potential for violation to NPDES or Water Quality Standards,” will the project help bring the area into compliance and/or will it prevent the contamination of nearest river, lake or navigable waters of Guam? The score is based on the water quality condition of the project area and the extent to which it is anticipated to address the problem.

	<b>Depth of Impact</b>	<b>Points values</b>
a.	Not meeting any requirements	10 points
b.	Not meeting some requirements	7 points
c.	Meeting most requirements	6 points
d.	Meeting all requirements	1 points
e.	Not applicable	0 points



**MINOR CONSIDERATIONS - 0 to 5 points each**

- 1). **Innovative and alternative technologies** – Does the project incorporate Innovative and/or Alternative Technology?

	<b>Depth of Need</b>	<b>Points values</b>
a.	Uses Innovative and Alternative Tech	5 points
b.	Partly Uses Innovative and Alternative Tech.	3 points
c.	Does not use I and /or A Technology	0 points

- 2). **Utilization** - Will projects make use of previously constructed plant capacity or facilities?

	<b>Depth of Need</b>	<b>Points values</b>
a.	Make full use	5 points
b.	Makes moderate use	3 points
c.	Make little use	1 points
d.	Make no use	0 points



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## FACT SHEET

### PROPOSED DRINKING WATER INFRASTRUCTURE GRANT PROJECT PRIORITY LIST

#### FISCAL YEAR 2022-2023

The Safe Drinking Water Act (SDWA) authorized the US Environmental Protection Agency (USEPA) to establish a Drinking Water State Revolving Fund (DWSRF) loan program to further the protection of public health in conformance with the objectives of the Safe Drinking Water Act. The DWSRF program was created as part of the 1996 Amendments to the Safe Drinking Water Act (SDWA). Section 1452 of the SDWA, as amended, contains the provisions governing the DWSRF program. The SDWA amendments established a strong emphasis on preventing contamination through source water protection and enhanced water system management. The program allows the USEPA to award federal grants for infrastructure improvements to public drinking water systems. In the Pacific Islands, the DWSRF is administered by USEPA Region 9 as the Drinking Water Infrastructure Grant Pacific Islands (DWIG PI) Program, which operates as a direct grant program as opposed to a revolving loan program. The principal objective is to fund projects to protect and promote public health and safety and to facilitate compliance with national primary drinking water regulations, or to otherwise significantly advance the public health protection objectives of the SDWA. The USEPA awards the funding to Guam on an annual basis to provide financing for planning, design and construction of eligible projects such as water supply systems replacement and upgrade, installation or upgrading of the treatment facilities, new or rehabilitation of wells, installation or upgrading of storage facilities, installation or upgrading of transmission and distribution systems, and replacing of aging infrastructure.

The DWIG PI program requires Pacific Islands jurisdictions to develop a priority ranking system and list for the projects that will be funded. The priority ranking system provides a clear, objective order of ranking for proposed drinking water infrastructure projects. Ranking and prioritizing are necessary because these grant funds are not sufficient to construct all infrastructure needed to achieve and maintain compliance with SDWA requirements and to protect public health. The associated funding sources are to be used to provide financial assistance that (1) addresses the most serious human health risks to drinking water, (2) is necessary to comply with the federal Safe Drinking Water Act (SDWA), and (3) assists eligible drinking water systems most in need. The priority ranking system reflects the policies of the Guam Environmental Protection Agency (Guam EPA) regarding the utilization of construction grant funds. As part of the process, a public review

period and hearing must be held to give members of the public the opportunity to provide information and comments on the proposed priority list.

The Guam EPA is responsible for developing an annual priority list of projects for funding consideration under the US Environmental Protection Agency (USEPA) drinking water infrastructure grants program. Under current guidelines from USEPA, the Guam Waterworks Authority (GWA) is the only supplier of drinking water in the territory that is eligible to receive grants from the DWIG PI program. Accordingly, Guam EPA and GWA, in conjunction with USEPA Region 9 work together to apply the criteria to project candidates to yield the project list.

Guam EPA reviews and revises its priority system criteria and priority list on a regular basis, so that the Territory of Guam will continue to qualify for the DWIG PI funds. The priority system, which is described in detail on the following pages, describes the methodology used to rank projects that are considered eligible for assistance. In accordance with USEPA Region 9 guidance, the priority system has been designed to ensure the priority is given to projects that (1) address the most serious risk to human health; (2) are necessary to ensure compliance with the requirements of the SDWA, and (3) assist systems most in need on a per household basis. The attached proposed priority list for FY 2022-2023 was developed consistent with the above mentioned criteria and with the goals of the DWIG PI program.

For more information or any aspect of the priority list process, contact **CAPT BRIAN G. BEARDEN, P.E., BSCEE**, Chief Engineer, Guam EPA Water Division at 671-3004779 or email address [brian.bearden@epa.guam.gov](mailto:brian.bearden@epa.guam.gov), or Water Pollution Control staff at 671-3004781, or visit the Guam EPA Main Office at 17-3304 Mariner Avenue, Tiyan, Guam.

# **FISCAL YEAR 2022-2023**

## **GUAM DRINKING WATER INFRASTRUCTURE GRANT PRIORITY RANKING SYSTEM**

**AND**

## **PROJECT PRIORITY LIST**

### **GUAM ENVIRONMENTAL PROTECTION AGENCY WATER POLLUTION CONTROL PROGRAM**

**#17-3304 Mariner Avenue, Tiyan  
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## **GUAM SAFE DRINKING WATER INFRASTRUCTURE GRANT (SDWIG) PROGRAM**

### **PRIORITY RANKING SYSTEM AND CRITERIA**

#### **SECTION I: GENERAL POLICY**

The Drinking Water State Revolving Fund (DWSRF) grant funds for the construction of public water supply systems are made available to Guam as authorized under the 1996 amendment of the Safe Drinking water Act (SDWA). In the Pacific Islands, the DWSRF is administered by USEPA Region 9 as the Drinking Water Infrastructure Grant Pacific Islands (DWIG PI) Program, which operates as a direct grant program as opposed to a revolving loan program. The provision for the Pacific Islands DWIG PI program is contained in Section 1452(j) of the SDWA. In summary, this section says that the DWIG PI program grants may only be used "for public water system expenditures referred to in subsection (a)(2)". Subsection (a)(2) then directs that financial assistance may be used for public water system expenditures which will facilitate compliance with the National Primary Drinking Water Regulations (NPDWRs) or will otherwise further the health protection objectives of the SDWA.

Under the DWIG PI program, Guam EPA is responsible for identifying potential projects, prioritizing those projects, and selecting which will receive funding. In order to accomplish this, Guam EPA is required by the USEPA to develop a prioritization system and priority list. The USEPA Region 9 is responsible for final approval of the priority ranking system and the priority list. In addition, USEPA Region 9 is responsible for the overall management of the DWIG grant award to ensure compliance with the DWIG PI guidelines and 40 CFR Part 35, Subpart I, and for administering the award of individual projects and tracking progress after an award. In Guam, the Guam Waterworks Authority (GWA) is currently the only eligible recipient (grantee) for DWIG PI funds. As the grantee, GWA is responsible for submitting individual grant applications to USEPA for DWIG PI funds for projects on the priority list.

A DWIG PI grant will be made only for public water system projects that, as determined by USEPA, will: a) facilitate compliance with the National Primary Drinking Water Regulations (NPDWR) or, b) significantly further the health protection objectives of the SDWA. Projects to address existing health standards that have been exceeded or to prevent future violations of the rules are both eligible for funding.

The primary purpose of the priority system is to establish a numerical rating methodology used by the staff of the Guam EPA and GWA to evaluate needed projects in Guam in terms of the above stated goals. Eligible projects are placed in a list and are assigned a score and priority as described in the projects rating criteria. The product of this process is the project priority list, which will be made available for public review and written comment, prior to a final public hearing at which oral comments may be made. Following the public hearing, which may take place during a regularly scheduled meeting of the Guam EPA Board of Directors, the project priority list may be adopted with or without modification based on comments received, and subsequently transmitted to the USEPA for final approval and use for the funding of eligible projects. Appropriate public

information material consisting of the project ranking criteria and proposed project priority list is made available during the public comment period.

### **Priority System**

In accordance with USEPA Region 9 guidance, the priority system has been designed to ensure the priority is given to projects that (1) address the most serious risk to human health; (2) are necessary to ensure compliance with the requirements of the SDWA, and (3) assist systems most in need on a per household basis. The priority list ranks projects with respect to other projects on the list. Projects with a higher score are ranked as higher priority than projects with lower scores. All projects are included on the list but available funding determines how many projects will be considered to be in the fundable range for a given year. The project priority list is intended to set the order by which projects are funded, from highest priority to lowest, however Guam EPA in conjunction with USEPA may allow for lower priority projects or “emergency projects” to be funded ahead of higher priority projects upon review of specific rationale presented by GWA.

### **Eligible uses of DWIG PI Funds**

A DWIG PI grant may be made only for public water system projects that, EPA determines, will: a) facilitate compliance with the National Primary Drinking Water Regulations (NPDWR) or, b) significantly further the health protection objectives of the SDWA. Projects to address existing health standards that have been exceeded or to prevent future violations of the rules are both eligible for funding. Examples of Fundable Projects are listed below:

- a. Projects to:
  - rehabilitate or develop sources (excluding reservoirs, dams, dam rehabilitation and water rights) to replace contaminated sources; install or upgrade treatment facilities if, in the EPA Regional Offices' opinion, the project would improve the quality of drinking water to comply with primary or secondary standards;
  - install or upgrade storage facilities, including finished water reservoirs, to prevent microbiological contaminants from entering the water system;
  - install or replace transmission and distribution pipes to prevent contamination caused by leaks or breaks in the pipe, or improve water pressure to safe levels; and
  - replace aging infrastructure if the replacement is needed to maintain compliance or further the health protection goals of the SDWA.
- b. System consolidation – A project to eliminate an existing public water system through consolidation with another existing water system is eligible for funding, if the water system to be consolidated is currently contaminated or is otherwise posing a risk to the public health of the community. This includes consolidation of systems which are considered to lack adequate technical, financial, or managerial capacity if it is determined that consolidation is the best solution to correct the lack of capacity.
- c. Existing homes that are not currently connected to an existing public water system – A project to connect existing homes – that do not currently receive their drinking water from a public water system – to an existing public water system is eligible for funding, if the

current source of the drinking water available to the homes is contaminated or is otherwise posing a risk to the public health of the community. (Note: DWIG PI grants cannot be made to individual homes, villages, or communities).

- d. Feasibility studies, engineering work, and project management – While the purpose of the DWIG PI funds is to improve water system infrastructure, some preliminary work is typically necessary to reach the stage of an infrastructure project. Often feasibility studies are necessary to identify the best and most cost effective solution to an infrastructure need, and engineering design work is necessary for almost every construction project. Such work is an eligible expense for DWIG PI funds and may be funded as discrete projects. Also, a grant may be awarded for design/build projects.

### **Ineligible uses of DWIG PI Funds**

The SDWA specifically disallows projects for:

- monitoring,
- operation & maintenance, and
- land acquisition (*unless the land is integral to the project and is from a willing seller*).

In addition to the SDWA limitations, USEPA has determined that a number of other types of projects are ineligible for funding through the DWIG PI program:

- Dams, or rehabilitation of dams;
- Water rights (*except if the water rights are owned by a public water system that is being consolidated and the USEPA Regional Office has determined that the consolidation is necessary because the system to be consolidated lacks adequate technical, managerial, or financial capacity*);
- Reservoirs (*except for finished water reservoirs and those reservoirs that are part of the treatment process and are located on the property where the treatment facility is located*);
- Projects needed mainly for fire protection;
- Projects intended primarily for future growth; and
- Projects for systems that are in significant noncompliance with any requirement of the NPDWRs, *unless* the project which is being funded will ensure full compliance with the NPDWRs.

## **SECTION II. ADOPTION OF PRIORITY LIST AND PUBLIC PARTICIPATION**

Each year the Guam EPA staff will work closely with GWA to review the previous priority list and prepare a new list which includes all projects for which federal assistance will be requested during a period starting at the beginning of the next fiscal year. The Guam EPA and GWA staff will reevaluate all unfunded projects on the previous year's list, as well as any new proposed projects developed by GWA. The staff will consider and incorporate applicable EPA guidance in the development of the list. If no changes to the previously approved priority list are required,



GWA and Guam EPA may choose to continue utilizing the previous priority list without change for the following year.

Should a new or revised priority list be prepared as a result of the annual review, the Guam EPA will conduct a public hearing on the proposed priority list following a 30 day public comment period in order to solicit final public comment, encourage public participation and approve the priority list taking into account the public comments. No less than 30 days prior to the hearing there will be a notice published in local newspapers and fact sheets will be available to all interested parties. The Guam EPA may also provide such notice by posting on the Guam EPA website, or any other means reasonably calculated to provide such notice to the general public.

Guam EPA will consider all testimony presented (both written and oral) at the public hearing or in writing prior to the public hearing and may modify the proposed list accordingly. Such revision will not be arbitrary but will be based on the established project rating method described in Section IV. The new rating would be based on new or corrected information obtained from the public participation. A responsiveness summary will be prepared and made a part of the records. The list and responsiveness summary will then be presented to the Guam EPA Board of Directors for consideration and adoption during a regular, public meeting of the Board. The adopted list will be submitted to USEPA for review and approval prior to start of the next fiscal year. Grants may be awarded from the priority list subsequent to USEPA acceptance of the list and the beginning of the new fiscal year.

### **Section III. ADDITIONS, MODIFICATIONS, BYPASS AND REMOVAL**

Priority list changes may only be made with the approval of USEPA Region 9. Additions and modifications (excluding contract change orders) which significantly alter the fundable priority list after its adoption by Guam EPA, will be made only when public health hazards or other valid and compelling reasons exist, such as for (but not limited to) emergency projects brought about by unforeseen infrastructure failures. The sole exemption to this requirement is that if additional funds become available during the year, the fundable portion of the priority list may be increased by including the highest ranked projects from the extended lists which are ready to proceed during the funding year.

The intention of Guam's priority system is to ensure projects that are on the list that are ready to proceed receive the funding they require to complete the project. Projects on the fundable portion of the priority list may be bypassed after written notice is provided to the USEPA and the Guam EPA. Requests to bypass must be accompanied by the specific rationale for the request, and will be reviewed by both USEPA and Guam EPA. Acceptable rationales for bypassing a project may include, but not be limited to, a project not being ready to proceed during a funding year, or changing circumstances such as critical failures or new information such as modeling or monitoring data that make the need for a lower ranked project more important. Projects that are bypassed will remain on the priority list for consideration in future years.

## **Emergency Projects**

It is possible that after Guam EPA uses the prioritization system to rank projects for a year, and informs the public of the rankings and selections, that the need for an emergency project will occur. Such projects may include those where some type of failure was unanticipated and requires immediate attention to protect public health. In such cases, Guam EPA has the authority to fund the emergency project ahead of the selected projects. The projects that were by-passed should receive the highest priority for the next available funding cycle. The determination will be based on an emergency situation resulting from an unanticipated water or wastewater system failure which requires immediate attention to protect the public health. The determination will also depend on an imminent and substantial health risk for cases involving chemical contamination or a potential disease outbreak. Specific examples related to the DWIG PI include, but are not limited to: discovery of contamination in a water source; and failure of or damage to treatment system components, water storage tanks, transmission or distribution piping.

## **SECTION IV. PROJECT PRIORITY RANKING METHOD AND CRITERIA**

### **Priority Ranking System**

The project ranking is the method used in order to establish a project priority listings. Projects shall be ranked in accordance with the priority criteria on the basis of the total number of ranking points each project receives. Guam EPA evaluates the drinking water projects developed by GWA individually for their anticipated impacts to acute health risks particularly those related to microbiological organisms or replacement of lead-containing water system components, which will be given the highest priority. The next priority has been given to situations that pose chronic and longer term risks to consumers, such as organic chemical contamination. The scoring criteria also considers issues that are related to infrastructure upgrades or replacement. Rating or scoring the project list will be done by both Guam EPA and GWA for the purpose of establishing the project priority list. In accordance with USEPA Region 9 guidance, priority for use of the DWSRF funds shall focused on projects that:

- Address the most serious risk to human health;
- Are necessary to ensure compliance with the requirements of the SDWA; and
- Assist systems most in need on a per household basis

The total numerical score for a project or a project segment will be the sum of the scores for technical and non-technical criteria. Projects with the highest number of priority points are ranked towards the top of the list.

In order to establish a Priority List of Projects, Guam EPA has developed criteria based on the above goals, considering the factors such as: violations of maximum allowable levels (primary standards), quantity deficiencies, design deficiencies, vulnerability to potential pollution, violations of recommended maximum levels (secondary standards), system consolidation, compliance orders and source protection. Points are assigned based on the degree to which the

project addresses each criteria. The larger the number, the greater the potential beneficial impact associated with the project.

The subjective nature of the priority ranking system needs to be recognized. Guam EPA and GWA staff are expected to exercise judicious, professional judgment in assigning priority scores, and especially in prioritizing closely ranked projects.

## **Ranking Criteria**

### **1. Funding Priority Formula**

The project priority points (P) are derived from the formula:

$$P = A + B + C + D + E + F + G + H$$

Where the factors are defined as follows:

- A = Violations of Maximum Allowable Levels (Primary Standards)
- B = Quantity Deficiencies
- C = Design Deficiencies
- D = Vulnerability to Potential Pollution
- E = Violation of Recommended Maximum Levels (Secondary levels)
- F = Consolidation
- G = Compliance Orders
- H = Source Water Protection

### **2. Factors Descriptions and Scoring**

#### **A. Violations of Maximum Allowable Levels (Primary Standards)**

This factor relates to violations of Primary Maximum Contaminant Levels (MCLs). Point values will be the sum of the points for all violations of the contaminant during a twenty four (24) month period, prior to the date of evaluation. Contaminants which are reported quarterly, such as nitrate, may include up to eight (8) violations during this twenty four (24) month period. Contaminants which are reported monthly, such as fecal coliform, may include up to twenty four (24) violations during this twenty four (24) month period. Violations of MCLs for contaminants based on a running annual average, such as total trihalomethanes, will be based on a twelve (12) month reporting period and will include only the severity value. Violations of more than one contaminant are additive. Violations must be documented by reporting in the Safe Drinking Water Information System (SDWIS).

<b>Contaminant</b>	<b>Severity (points per violation)</b>
Antimony	10
Arsenic	10
Asbestos	10
Barium	2
Beryllium	10
Cadmium	10
Chromium	10
Fluoride>4	5
Gross Alpha Radioactivity	5
Gross Beta Radioactivity	5
Lead	10
Mercury	10
Nickel	10
Nitrate	20
Selenium	5
Thallium	10
Turbidity (Significant Non-complier)	10
Radium	10
Fecal Coliform	20
Total Coliform (Significant Non-Complier)	10
Total Trihalomethanes	10
Pesticides and other SOC's	10
Volatile Organic Compounds (VOCs)	10
Haloacetic Acids	10

## **B. Quantity Deficiencies**

Quantity deficiencies are shortages of water due to source, treatment or distribution problems. These conditions must be documented by inspection records, a comprehensive performance evaluation, or another system evaluation.

<b>Condition</b>	<b>Severity (points per violation)</b>
Continual shortage	10
Shortage during peak demands (daily)	8
Shortage during high use (seasonal)	6

## **C. Design Deficiencies**

Design deficiencies are those which could be corrected by enlargement, repair, or replacement of a portion of the system. Deficiencies of more than one condition are additive. These conditions must be documented by inspection records, a comprehensive performance evaluation, or another system evaluation.

<b>Condition</b>	<b>Severity (points per violation)</b>
Inadequate filtration (surface)	10
Pressure filtration	9
Inadequate disinfection	10
Inadequate chemical feed	8
Inadequate mixing	8
Inadequate settling	8
Inadequate storage	8
Inadequate distribution (low pressure)	8
Inadequate distribution (area not served)	8
Inadequate distribution (deterioration)	8
Demand exceeds design capacity	10
Inadequate laboratory equipment	7
Inadequate intake structure	8
Improper well construction	10
Groundwater under the influence of surface water	10
Inadequate water treatment wastewater disposal	10

#### **D. Vulnerability to Potential Pollution**

Vulnerability describes a condition in which the source of supply for a system could potentially be contaminated. To claim these points, the proposed project must address the potential source of contamination. Vulnerabilities to more than one contaminant or through more than one pathway are additive. These conditions must be documented by vulnerability assessments for monitoring waivers or source water protection area assessments.

<b>Condition</b>	<b>Severity (points per violation)</b>
Point source discharge in delineated area	10
Subject to industrial spills	5
Subject to agricultural chemicals	5
Subject to oil/gas operations	5
Unprotected watershed	3

#### E. Violation of recommended Maximum Levels (Secondary Standards)

Recommended maximum levels are Secondary Maximum Contaminant Levels (SMCLs) set for parameters which are not harmful to human health, but make the water undesirable for use. Deficiencies of more than one SMCL are additive. These conditions must be documented in the GEPA/GWA Laboratory database.

Contaminants	Severity
Chloride	3
Color	3
Copper	3
Corrosivity	3
Foaming Agents	3
Iron	3
Manganese	3
Odor	3
pH	3
Sulfate	3
TDS	3
Zinc	3

#### F. Consolidation

Projects which results in the consolidation, interconnection, or improvement of services for two or more water systems shall add twenty (20) for consolidation, ten (10) for interconnections, and ten (10) for improvement of services such as back up or emergency supply. Projects may meet more than one of these conditions, in which points are additive. The points awarded for this criteria must be documented in the preliminary engineering report.

#### G. Compliance Orders

Projects that will result in compliance with a formal enforcement action from the Guam EPA or USEPA (or federal court orders stemming from USEPA enforcement actions) will receive fifty (50) points.

#### H. Source Water Protection

Water supply systems which have implemented source water protection programs such as watershed programs or wellhead protection programs will add ten (10) points to their total.

SAFE DRINKING AND CLEAN WATER STATE REVOLVING FUND GRANT PROPOSED PROJECTS PRIORITY LISTING RANKED BY GUAM EPA & GWA SRF FUNDING YEAR 2020-2024																																																							
NAME OF RATER:						SAFE DRINKING WATER INFRASTRUCTURE GRANT									WASTEWATER (WW) INFRASTRUC																																								
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WATER HARD INFRASTRUCTURE	Wells	1	Wells & Water Treatment	\$12,000,000.00	This project, which will be done in phases, is for the construction of utilities to address inoperable wells, wells requiring upgrades to the treatment system, and unproductive wells. Wells within this project may need Granular Activated Carbon (GAC) systems to remove TCE, PCE, pesticides, PFAS and other emerging contaminants or need proper abandonment necessary to protect Guam's water lens quality. Well abandonment will include the removal of pumps/motors, pipe columns, sounding tubes, power cables, etc.	0	0	10	5	0	10	50	10	85																																									
	Water Mains and Distribution Lines	2	Overall Island AC Pipe Replacement	\$45,000,000.00	<div>This project, which shall be carried out in multiple phases, proposes to replace asbestos concrete (AC) waterlines, isolation valves &amp; control valves around the island. Many of these lines have been identified in a pipe prioritization study and have been listed in GWA Operations' list for high priority line replacements due to repetitive line failure. Work to include AC line replacement for the following:</div> <table><tr><td>Location:</td><td>Est. Length (LF)</td></tr><tr><td>Talofofo</td><td>416</td></tr><tr><td>Santa Rita</td><td>6,026</td></tr><tr><td>Agat</td><td>81</td></tr><tr><td>Agana</td><td>3,408</td></tr><tr><td>Agana Heights</td><td>8,043</td></tr><tr><td>Asan</td><td>4,370</td></tr><tr><td>Sinajana</td><td>9,267</td></tr><tr><td>Mongmong-Toto-Maite</td><td>5,002</td></tr><tr><td>Barrigada</td><td>26,630</td></tr><tr><td>Chalan Pago/ Ordot</td><td>7,284</td></tr><tr><td>Mangilao</td><td>12,330</td></tr><tr><td>Dededo</td><td>32,403</td></tr><tr><td>Yigo</td><td>9,029</td></tr><tr><td>Merizo/ Inarajan</td><td>28,000</td></tr><tr><td>Toto Canada Loop Rd</td><td>6,000</td></tr><tr><td>Chalan Pago (Maimai Rd.)</td><td>22,000</td></tr><tr><td>Tamuning (Jonestown)</td><td>22,500</td></tr><tr><td>Piti (Nimitz Hill)</td><td>30,000</td></tr></table>	Location:	Est. Length (LF)	Talofofo	416	Santa Rita	6,026	Agat	81	Agana	3,408	Agana Heights	8,043	Asan	4,370	Sinajana	9,267	Mongmong-Toto-Maite	5,002	Barrigada	26,630	Chalan Pago/ Ordot	7,284	Mangilao	12,330	Dededo	32,403	Yigo	9,029	Merizo/ Inarajan	28,000	Toto Canada Loop Rd	6,000	Chalan Pago (Maimai Rd.)	22,000	Tamuning (Jonestown)	22,500	Piti (Nimitz Hill)	30,000	0	10	16	10	0	20	0	10	66			
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WATER HARD INFRASTRUCTURE	WTP	3	Ugum WTP Rehabilitation	\$3,400,000.00	This project is to rehabilitate the surface water treatment plant in Talofofo. The associated work will include, but not be limited to, the replacement of plant items for raw water processing, headworks, contact and sedimentation basins, sludge settling /neutralization systems, thickening and dewatering systems, chemical feed and plant water systems. EG: Repair/ replacement of membranes, sluice gates, sludge rakes, chemical storage hoist, and river intake pumps and gauges, etc.	0	10	20	2	0	20	0	10	62				
	Public Water SCADA Network	4	Public Water SCADA Network	\$6,500,000.00	This proposed project will design and install a SCADA system at 40 water sites for 24/7 monitoring to send alarms and immediately alert Operations when emergencies are occurring. Other purposes include early detection and response to problems before they become bigger more costly issues; providing field information for reports, planning and scheduling preventive maintenance, troubleshooting and identifying the cause of the problem, and planning future improvements.	0	8	16	0	6	30	0	0	60				
WATER HARD INFRASTRUCTURE	Water Distribution System	5	Gil Breeze Subdivision Water Main	\$4,700,000.00	Residents in the Gil Breeze Subdivision have been without water service for over a decade. The private developer responsible for the subdivision's infrastructure installed substandard water pipes that did not meet GWA standards and could not be accepted for water service. The private developer has since declared bankruptcy and left the island. The residents must haul water to their homes, which is a sanitary issue, particularly during a pandemic. The project will involve construction of 6-inch water mains in the subdivision and off-site water mains, booster pumps, and easements.	0	10	20	10	0	10	0	5	55				
	Water Mains and Distribution Lines	6	Islandwide Water Line Replacement	\$22,000,000.00	This line replacement project is to address leaks, failures and age issues.	0	10	8	5	0	20	0	10	53				

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WATER HARD INFRASTRUC TURE	Springs	7	Santa Rita Springs Improvements	\$4,200,000.00	Construction of upgrades to the Santa Rita Springs facilities to maximize the water collection at the site.	0	10	18	5	0	10	0	10	53				
	Valve/PRV	8	Islandwide Valve & Pressure Reducer Valve Replacement	\$6,000,000.00	This valve and pressure reducing valve replacement project is to address failures and age issues.	0	0	16	0	0	20	0	10	46				
WATER HARD INFRASTRUCTURE																		
WATER-OTHERS	Wells	9	Electric Power Line Conditioning and Protection for Deep Wells	\$2,000,000.00	This project involves the design and installation of power line conditioners and improved motor controls at critical deep wells experiencing frequent submersible motor failures. Motor failures increase operational costs and downtime of deep wells.	0	8	26	0	0	10	0	0	44				
WATER - OTHERS	Redundant Power Supply	10	Standby Generator Repair & Replacement	\$4,000,000.00	GWA currently owns 109 standby generators for water and wastewater facilities to provide backup power during power outages. Many of these generators were purchased and installed more than a decade ago. Guam's natural environment is very corrosive and harsh, causing wiring and circuits boards to prematurely fail. A recent assessment of all GWA generators indicates a need to overhaul or replace 39 of the 109 generators ranging in size from 15KW to 800KW.	0	8	26	0	0	10	0	0	44				
WATER HARD INFRASTRUCTURE	Booster Pump Stations	11	Islandwide Booster Rehabilitation	\$7,500,000.00	This project is to rehabilitate water booster pump station in the Northern, Central and Southern systems. The associated work will include, but not be limited to, upgrading of pumps and motors, replacement of associated valves and piping, upgrading the electrical equipment and wiring, (including motor protection equipment) and the installation of flow meters and pressure transducers.	0	6	10	5	0	10	0	10	41				

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PROJECTS IN-PROGRESS/ONGOING	Wells		Well Rehabilitation A-28, M-14, D-15 and F-7 Design	\$670,000.00	A-28, M-14, D-15, and F-07. Wells A-28 and M-14 have been removed from service due to pump failures or collapsed pipe casings/well screens. Wells D-15 and F-07 are currently online and producing water. However, they are older facilities and are in need of rehabilitation.	0	6	10	10	0	10	0	10	46					
	Wells		Well Rehabilitation F-3, A-2, A-7, A-12 & D-5 Construction	\$6,600,000.00	F-03, A-2, A-7, A-12 & D-5 design completed pending construction.	0	6	10	5	0	10	0	10	41					
	Water Hydraulic Model Barrigada Service Area		Pressure Zone Realignment	\$4,120,000.00	GWA has selected several pressure zones to be equipped with instrumentations to be use for hydraulic modeling and analysis.	0	10	16	5	0	20	0	10	61					
WW HARD INFRASTRUCTURE	Wastewater Treatment Plants	1	Fat, Oil, and Grease Receiving Station	\$1,500,000.00	The Northern District Wastewater Treatment Plant currently is not able to accept fat, oil, and grease (FOG). There are a few private FOG processing facilities on Guam and at least one of them has environmental violations. The expanded NDWWTP will have an autothermal thermophilic aerobic digester (ATAD), which can process FOG. A new septage receiving station or modifications to the existing station need to be completed, along with yard piping, in order to convey FOG to the ATAD system.										10	10	7	3	
	Wastewater Collection Systems	2	Sewer Loan Revolving Fund	\$250,000.00/year	GWA will be implementing a cesspool and septic tank elimination plan to protect the Northern Guam Lens. Customers are responsible for the cost of constructing the private sewer lateral connection to the public sewer system. Sewer loans are available to qualified applicants to alleviate the financial burden of connecting to the public sewer.										10	10	6	0	



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															Max Points: 10	Max Points: 10	Max Points: 10	Max Points: 5
WW HARD INFRASTRUCTURE	Wastewater Collection Systems	7	Groundwater Protection Zone Collection Line Implementation	\$13,000,000.00	The Groundwater Management Protection Zones established by the Guam EPA sets minimum standards that involve housing or development within 1,000 ft. radius of a deep well. This project will take into account the GWA Wellhead Protection Plan to prioritize the installation/ replacement of a sewer collector system in areas that are the greatest risk to the aquifer or wellhead. Identified areas include Santa Ana Subdivision, Chalan Bada, Chalan Lumasu, Rt. 15, Gayinero Rd., Chalan Eskuela, Barlou St., Camation Ave., Rt. 10A Airport Rd., Rt. 4 Sinajana, Agana Springs and Afame Rd.										10	10	1	0
	Wastewater Collection Systems	8	Islandwide Collection System Replacement	\$5,000,000.00	This project is to rehabilitate, repair, or replace sewer lines (not already identified in other projects) due to failures, leaks and age issues.										6	4	6	3
	Wastewater Collection/ Transmission Systems	9	Gil Baza Subdivision Sewer Collection/ Transmission System	\$7,900,000.00	Residents in the Gil Baza Subdivision have been without sewer service for over a decade. The private developer responsible for the subdivisions' infrastructure did not install sewer collection/transmission systems for the quarter-acre lots. The private developer has since declared bankruptcy and left the island. There are no permitted septic tank/leaching field systems in these subdivisions. The residents use portable toilets and, likely, unpermitted onsite disposal systems. The project will involve construction of onsite and offsite collection/transmission systems.										10	10	0	0
	Wastewater Collection Systems	10	Sewer Line Replacement/ Rehabilitation	\$5,000,000.00	This project intends to construct/complete components of past projects that were intentionally deleted due to funding issues. Two projects in particular, the Southern SSES Improvements-Finile street and the Agat sewer rehabilitation/replacement projects were funded design/construction via USEPA funds. This projects aims to complete all components outlined in the design.										6	0	6	3



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WW HARD INFRASTRUCTURE	Wastewater Collection Systems	14	Barigada and Agana Heights Sewer Collection Systems	\$4,000,000.00	This project will address projects that were started but, due to competing critical needs, was not completed as designed. 1. Leyang Barigada - Leyang road 3,000LF of sewer collection & construction of lift station. 2. Agana Heights - Niyok Drive, Matcella Drive, Kolla Dr., and Paasan Drive 3,000LF.										4	8	1	0
	I/I Study related & design parameters	15	Central and Southern Sewer Line and Drainage Survey & Mitigation Study and Construction	\$1,000,000.00	During rain events, GWA Wastewater Operations has witnessed a large amount of inflow and infiltration (I&I) coming from the Nimitz area discharging into the terminating manhole at the Piti Pump Station. This would eventually cause the sewer lines upstream of Asan Pump Station to be surcharged, and at times result in a sanitary sewage overflow. The central sewer system experiences similar I&I in areas including Barigada, upstream of the Barigada pump station.										6	0	7	0
WW HARD INFRASTRUCTURE	Wastewater Collection Systems	16	Sewer Line in Theresa Court, Jonestown	\$2,000,000.00	This project is to reconnect homes that are connected to a sewer system that is impassible for GWA's utility vehicles. This segment of the sewer line is located behind residential homes not on dedicated public access roads or easements. There have been sewer manhole overflows.										6	4	7	0
WW HARD INFRASTRUCTURE	Sewer Pump Stations	17	Central System Pump Station Rehabilitation	\$2,000,000.00	Rehabilitation and upgrade of Dairy Rd. PS, Mangilao PS, Harmon PS, and Pago Double PS. Complete electrical makeover, pumps and motor upgrades, valving and SCADA equipment, motor protection units and related appurtenances.										2	2	6	0
WW HARD INFRASTRUCTURE	Sewer Pump Stations	18	Tai and Namo Sewer Pump Station Rehabilitation	\$2,000,000.00	Tai PS and Namo PS complete electrical makeover, pumps and motor upgrades, valving and SCADA equipment, motor protection unit and related appurtenances.										4	0	6	0



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WW HARD INFRASTRUCTURE	Wastewater Treatment Plants	19	Sludge Bin Shelters	\$1,000,000.00	At the Hagatna WWTP, processed sludge is collected into a bin similar to that of used for garbage with no overhead cover, it is then hauled to the landfill. Guam's inclement weather six months out of the year interrupts this process due to sludge being saturated with rain water. This project is intends to provide protection against inclement weather.										2	0	6	0
	Sewer Pump Stations	20	Removal of Underground Fuel Storage Tanks at Central and Southern Sewer Pump Stations	\$1,500,000.00	Remove all underground fuel storage tanks at Central and Southern stations and replace them with above-ground storage tanks, as needed.										2	4	6	0
	Wastewater Treatment Plants	21	Structural Analysis and Repairs of the Causeway to the Hagatna WWTP	\$1,000,000.00	The causeway to the Hagatna WWTP has exposed re-bars under the three bridges. The structural integrity needs to be maintained in order to maintain raw wastewater flow to the Hagatna WWTP. This project is related to the Hagatna Main redundant force main project, as the redundant force main might be constructed on the causeway.										4	0	6	0
	Sewer Pump Stations	22	Bar Screen for Ga'an Sewer Pump Station	\$1,000,000.00	Installation of a mechanical bar screen for Ga'an pump station. Prior to taking the old Agat Wastewater Treatment Plant offline, Ga'an was receiving effluent, not raw wastewater. When the old Agat WWTP was demolished, there was no solids removal for wastewater that now enters the Ga'an Pump Station. This could result in pump failures.										0	0	1	0
	Wastewater Collection Systems		Hagatna Sewer Pump Station Redundant Force Main	\$3,000,000.00	This project will provide redundancy to the existing Hagatna pump station sewer force main (2,600LF and 36 inches in diameter). All sewage entering the Hagatna wastewater treatment plant is pumped from the Hagatna pump station.										10	0	10	3
	Wastewater Collection Systems		Fujita Sewer Pump Station Redundant Force Main	\$4,000,000.00	This project will provide redundancy to the existing Fujita sewerage force main (6,000LF and 18 inches in diameter ductile pipe). Most of the sewage in Tumon is pumped through the Fujita Pump Station and force main.										10	4	6	0

SAFE DRINKING AND CLEAN WATER STATE REVOLVING FUND GRANT PROPOSED PROJECTS PRIORITY LISTING RANKED BY GUAM EPA & GWA SRF FUNDING YEAR 2020-2024																		
NAME OF RATER:						SAFE DRINKING WATER INFRASTRUCTURE GRANT									WASTEWATER (WW) INFRASTRUC			
CATEGORY	CIP Group	Ranking	Project Name	Estimated Total Cost	Project Description	A	B	C	D	E	F	G	H	TOTAL  Scoring varies- see SDWA standards	Major Items			Mino
						Violations of Max. Allowable Levels	Quantity Deficiencies	Design Deficiencies	Vulnerability to Potential Pollution	Violation of Recommended Msx. Levels (Sec. levels)	Conso lidation	Compliance Orders	Source Water Protection		Public Health	Aquifer Protection	Violation	I & A Project
															Max Points: 10	Max Points: 10	Max Points: 10	Max Points: 5
WW PROJECTS IN PROGRESS	Wastewater Collection Systems		Asan-Adelup-Agana Route 1 Sewer Rehabilitation	\$10,000,000.00	These pipes are corroded and heavily deteriorated. This project is to address critical sewer pipe replacement in Asan and Agana.										8	0	7	3
	Wastewater Collection Systems		Dungca's Beach Collection Sewer Line Relocation	\$10,000,000.00	The upgrade/relocation of the sewer collection line and manholes which are already within the beach area. Said collection lines are submerged in water during high tides and high wave action. This has a great potential for I/I and high risk in corrosion due to salt water. The beach was listed as a Guam impaired water based on Guam's Integrated Report. The project will cover the design, construction and construction management.										10	0	7	0
	Wastewater Collection Systems		Tumon Hot Spots - Construction	\$10,000,000.00	These pipes are corroded and heavily deteriorated. This project is to address critical sewer pipe replacement in San Vitores Road, Tumon.										8	0	6	0
	Wastewater Collection Systems		SSES Phase II Sewer Pump Station - Construction	\$1,000,000.00	This is project is to construct a sewer pump station near the Hyundai Subdivision to improve the sewer collection system.										8	0	6	0
	Wastewater Collection Systems		Tamuning Hot Spots - Construction	\$6,000,000.00	This project is to address areas in Tamuning deemed by GWA as hot spots.										8	0	6	0

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	

NATURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	35	
5	31	

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	28	Cured in place pipe (CIPP) rehabilitation will be used, where appropriate
5	28	
5	28	
5	28	



TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	26	
3	22	CIPP lining will be used, where appropriate
1	21	
5	20	CIPP lining will be used, where appropriate

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	20	
5	19	
1	19	

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	18	
5	18	
0	17	
5	15	
5	15	

STRUCTURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	13	
0	12	
0	10	
1	2	
5	28	
5	25	

TURE GRANT		REMARKS
Items	TOTAL	
Utilization Max Points: 5	Max Points: 40	
5	23	CIPP lining will be used, where appropriate
5	22	
5	19	
5	19	
5	19	

Location:	Est. Length (LF)
Talofofo	416
Santa Rita	6,026
Agat	81
Agana	3,408
Agana Heights	8,043
Asan	4,370
Sinajana	9,267
Mongmong-Toto-Maite	5,002
Barrigada	26,630
Chalan Pago/ Ordot	7,284
Mangilao	12,330
Dededo	32,403
Yigo	9,029
Merizo/ Inarajan	28,000
Toto Canada Loop Rd	6,000
Chalan Pago (Maimai Rd.)	22,000
Tamuning (Jonestown)	22,500
Piti (Nimitz Hill)	30,000

4,500,000.00  
6,000,000.00  
4,000,000.00  
5,000,000.00  
5,000,000.00  
20,500,000.00  
  
45,000,000.00

Water Mains and Distribution Lines		Merizo and Inarajan Asbestos Concrete water main replacement	\$4,500,000.00
Water Mains and Distribution Lines		Toto Canada Road Asbestos Concrete Water main Replacement.	\$6,000,000.00
Water Mains and Distribution Lines		Maimai Road Chalan pago Asbestos Concrete water main Replacement	\$4,000,000.00
Water Mains and Distribution Lines		Water line replacement in Jonestown Tamuning	\$5,000,000.00
Water Mains and Distribution Lines		Piti, Nimitz Hill Asbestos Concrete Water line Replacement	\$5,000,000.00



The project will replace about 28,000 LF of ACP lines that run through Merizo, Umatac, and Inarajan. This line is aged and constantly fails, it was identified in the pipe prioritization study and included in Operations listing high priority line replacements.	0	10	16
To install and upgrade line at Toto Canada Loop Rd 6,000lf or if feasible next priority on the GWA water line replacement report. This project will include design and construction and construction management. This line is aged and constantly fails, it was identified in the pipe prioritization study and included in Operations listing high priority line replacements. This pipe is 8 inches in diameter and <del>presumed to be installed</del>	0	10	16
Maimai Chalan Pago well field water main upgrade 22,000 lf. This project will include design and construction and construction management. This line is aged and constantly fails, it was identified in the pipe prioritization study and included in Operations listing high priority line replacements. This pipe is 6 and 8 inches in diameter and presumed installed prior to 1980's due to the asbestos	0	10	16
This project proposes to replace waterlines including isolation valves/control valves in the Jonestown subdivision and surrounding watermains. This project is critically important in that the subdivision is adjacent to Guam's only state hospital. In the past few years OPS experienced a high number of line breaks in the area causing low to no water pressure to the nearby hospiital due to valves put in more than 45 years ago failing. The crisis is worsen by the old asbestos waterlines failing more frequently There are approximately 22,500 LF of 8-inch of asbestos concrete/unknown materilal in the project area.	0	10	16
The project will replace about 30,000 LF of 6" ACP lines that run through Nimitz Hill in Piti. This line is aged and has been failing in multiple areas recently and is included in a listing of high priority line replacements.	0	10	16

5	0	10	0	10	<b>51</b>
5	0	10	0	10	<b>51</b>
5	0	10	0	10	<b>51</b>
5	0	10	0	10	<b>51</b>
5	0	10	0	10	<b>51</b>